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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,753	07/30/2004	Dinesh R. Patel	68.0505	4752
35204 7590 12/18/2007 SCHLUMBERGER RESERVOIR COMPLETIONS 14910 AIRLINE ROAD ROSHARON, TX 77583			EXAMINER HARCOURT, BRAD	
			ART UNIT 3676	PAPER NUMBER
			NOTIFICATION DATE 12/18/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

vsolis2@slb.com

Office Action Summary

Application No.

10/710,753

Applicant(s)

PATEL, DINESH R.

Examiner

Brad Harcourt

Art Unit

3676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

In view of the appeal brief filed on 8/22/2007, PROSECUTION IS HEREBY REOPENED. Rejection set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

Jennifer Gay.

Response to Amendment

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn. Additionally, the applicant's amendment after the non-final Office Action dated 8/11/2006 necessitated a new rejection, therefore this is a final action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7, and 19-23 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Williamson (US Patent No. 6,668,936).

Williamson discloses a hydraulic control system comprising four valve assemblies 12, 14, 16 and 18; a hydraulic control module 32; and hydraulic fluid line 36 which actuates valves 12, 14, 16 and 18 by receiving fluid from hydraulic control module 32. All of the assemblies act as flow valves since they each correspond to a respective production zone and each valve also prevents cross flow between its respective formation and any other formations. In reference to claims 4 and 5, Williamson discloses that the system could be "intersecting any number of zones" (col. 3, line 24) and thereby could have any number of flow valves all of which are actuated by the hydraulic control device. It is also disclosed that this system can be used to "regulate a rate of production from a zone, to regulate a rate of fluid injection into a zone, etc. (col. 8, lines 27-29). In reference to claims 2 and 20, it is understood that the flow and cross flow valves both are multi position valves. In reference to claims 3, 21 and 23, it is inherent that if a hydraulic control line actuated a valve, the actuating step would be a pressure cycle and the valves would be actuated when the hydraulic pressure rose above a certain pressure.

Claim 14 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Ringgenberg et al. (US Patent Application Publication No. 2002/0023746).

Ringgenberg discloses a system 20 for preventing cross-flow in a wellbore comprising first multi-position flow valve 30 that "is used to selectively permit fluid communication between the wellbore 12 [from formation 82] and the interior of fluid assembly 20" (par. 0025); second multi-position flow valve 104 controlling flow from formation 84 into assembly 20; valve 40 preventing flow between the two formations 82 and 84.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 and 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williamson (US Patent No. 6,668,936) in view of Murray (US Patent No. 8,862,865).

Williamson discloses most of the limitations of the claims, but does not disclose using a flapper valve and sleeve valves together. Murray discloses a gas lift system comprising a gas lift system comprising a flapper valve 16 and a sleeve valve 30 that are controlled by "existing control line connections" (col. 1, line 53). Said flapper comprises a flapper 18 which is actuated by a piston 26 that receives pressure from pressure chamber 28 and is biased closed by spring 24. Sleeve valve 30 comprises a

sleeve 32, port 34 and a piston 40 that receives pressure from pressure conduit 42. In reference to claims 11 and 12, the flapper is biased closed by spring 24 and would only open when enough hydraulic pressure is exerted on piston 26. In reference to claim 14, the flapper valve disclosed by Murray would act as a cross-flow prevention valve and would prevent cross-flow between two multi-position valves. It would have been obvious to a person having ordinary skill in the art at the time of the invention to include a flapper valve and control it by the same hydraulic line that controls the other valves of Williamson in view of Murray to better prevent cross-flow between two adjacent formations.

Claims 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ringgenberg et al. (US Patent Application Publication No. 2002/0023746) in view of Williamson (US Patent No. 6,668,936) and Murray (US Patent No. 8,862,865).

Ringgenberg discloses all of the limitations of the above claims with the exception of actuating multiple valves on the same system with the same hydraulic control line, and using both flapper and sleeve valves together in the same system. Williamson, as described above, discloses the use of multiple valves, including flow and cross flow valves, actuated by the same hydraulic control line. It would have been obvious to a person having ordinary skill in the art at the time of the invention to actuate a number of valves for any purpose with one hydraulic line on the system of Ringgenberg in view of Williamson to reduce the complexity of the system and reduce the need for multiple hydraulic lines to be placed downhole.

Additionally, Murray, as described above, discloses the use of flapper and sleeve valves together. It would have been obvious to a person having ordinary skill in the art at the time of the invention to use sleeve valves as flow valves restricting flow from a formation on the system of Ringgenberg in view of Murray to provide a valve which does not interfere with longitudinal flow through the flow passage of the tubing. It would have been obvious to a person having ordinary skill in the art at the time of the invention to include a flapper valve as a cross flow prevention valve on the system of Ringgenberg in view of Murray to provide a valve that easily prevents flow through the tubing string.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brad Harcourt whose telephone number is 571-272-7303. The examiner can normally be reached on Monday through Friday from 8:30 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer Gay can be reached on 571-272-7029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Jennifer Gay
Supervisory Patent Examiner
Art Unit 3676

BH
11/13/07